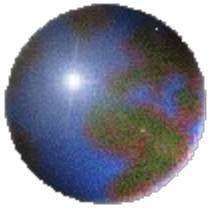
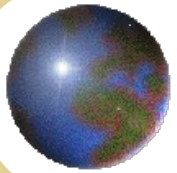


A Transformational Approach to Capabilities-Based Planning

December 2003

Understanding Key Concepts



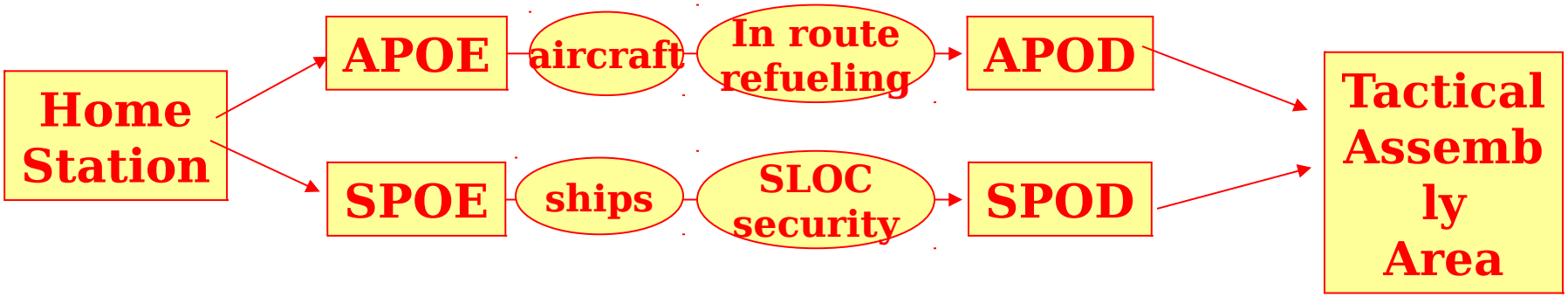
- A capability is the ability to perform a mission or task, to achieve a goal, or to produce an output
  - Associated with Sec Def-assigned missions
  - Associated with future needs of the DoD
- A system (system of systems) is a group of interdependent, interactive entities (systems)working together to produce an output
- Readiness is a measure of the ability of a system (system of systems) to produce the desired output, i.e., its capability
- A system (system of systems) represents a capability to perform a mission/task
- Capability, Mission/Task, QDR Goal are equivalent terms

Capability-based planning = System-based planning

DoD Systems (Systems of Systems) Provide Capabilities

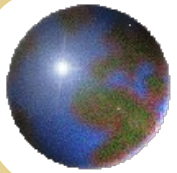
- A tank, ship, or airplane are systems
- Squads, platoons, companies, battalions, divisions are systems
- A Joint Task Force is a system
- A supply chain is a system
- The Defense Transportation System (DTS) is a system
- DoD systems provide the department's capabilities

The Defense Transportation System



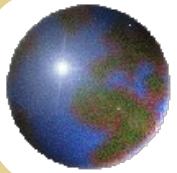
A system is no stronger than the weakest link

DoD Systems Execute Missions



- COCOMs organize joint forces as systems to execute Sec Def-assigned missions and associated METs, i.e., provide capabilities
  - Joint fires
- Service Secretaries organize service assets as systems to perform Title 10 functions, i.e., provide capabilities
  - Train units
- Heads of Defense Agencies organize agency assets as systems to perform assigned missions, i.e., provide capabilities
  - Defense communications system

Current Processes Contribute To Capabilities-Based Planning



- **Sec Def assigns COCOM missions in the CPG**
  - **Services and Agencies derive missions from OPLANS**
- **As part of the JSPS/JOPES, DoD component heads**
  - **Identify associated METs, i.e., capabilities required to execute the mission**
  - **Identify resources and systems needed to perform METs**
  - **Analyze the ability of the systems to perform METs in the context of assigned missions and planning scenarios**
  - **Identify shortfalls and constraints that limit the ability to perform METs**
- **DRRS (DoD D 7730.65) calls on component heads to report their readiness to execute METs, i.e., to provide capabilities associated with Sec Def-assigned missions**
  - **Joint Quarterly Readiness Report (JQRR) exists today**
  - **ESORTS under development**

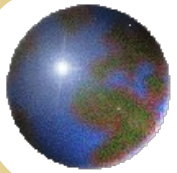
JCIDS Provides the Model for the DoD-Wide Capability-Based Planning Process

- **Functional Area Analysis (FAA)**
  - Identifies tasks, conditions and standards
- **Functional Needs Analysis (FNA)**
  - Identifies resources and systems
  - Assesses the ability of the systems to perform METs
  - Identifies shortfalls and constraints
  - Identifies a range of potential solutions
- **Functional Solution Analysis (FSA)**
  - Provides potential solutions
    - Integrated DOTMLPF changes
    - Product improvements
    - Adoption of interagency or foreign solutions
    - New materiel starts

Steps in the Capability-Based Planning Process

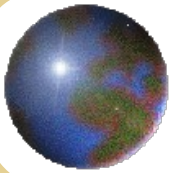
- **Identify capabilities of concern**
  - Six QDR goals
  - Sec Def assigned missions
  - Future needs of the department--JOpsC
- **Conduct a capability/mission analysis**
  1. Identify associated METs, i.e., tasks required to provide the capability or execute the mission
  2. Identify resources and systems needed to provide capabilities or to perform METs
  3. Analyze the ability of the systems
     - Consider each system in the context of assigned missions and planning scenarios
     - Identify shortfalls and constraints that limit the ability to provide capabilities or to perform METs
  4. Identify solutions to fixing shortfalls, redundancies, and constraints
     - Conventional DOTMLPF solutions
     - Transformational solutions

Step 1: Identify Associated METs

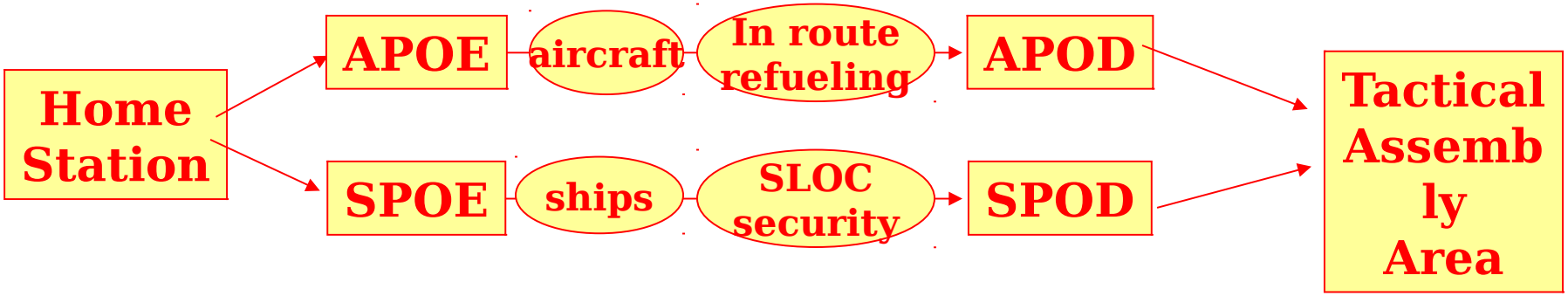


- Capabilities of interest to senior leadership will consist of multiple tasks and sub tasks
- SMEs must determine the tasks and sub tasks that must be performed to provide a capability
  - COCOM staffs analyze Sec Def-assigned missions
  - Service, Agency, Joint, and OSD staffs analyze capabilities linked to new needs
  - Process underway throughout the department
- DoD needs a Universal Task List
  - Current task lists do not allow cross service comparisons

Identify METs



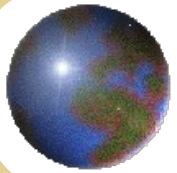
The Defense Transportation System



- **Identify capability—Deploy forces to a theater of war**
  - **Identify output—throughput at the TAA**
- **Identify METs for each step in the system**
- **DRRS should facilitate this process**

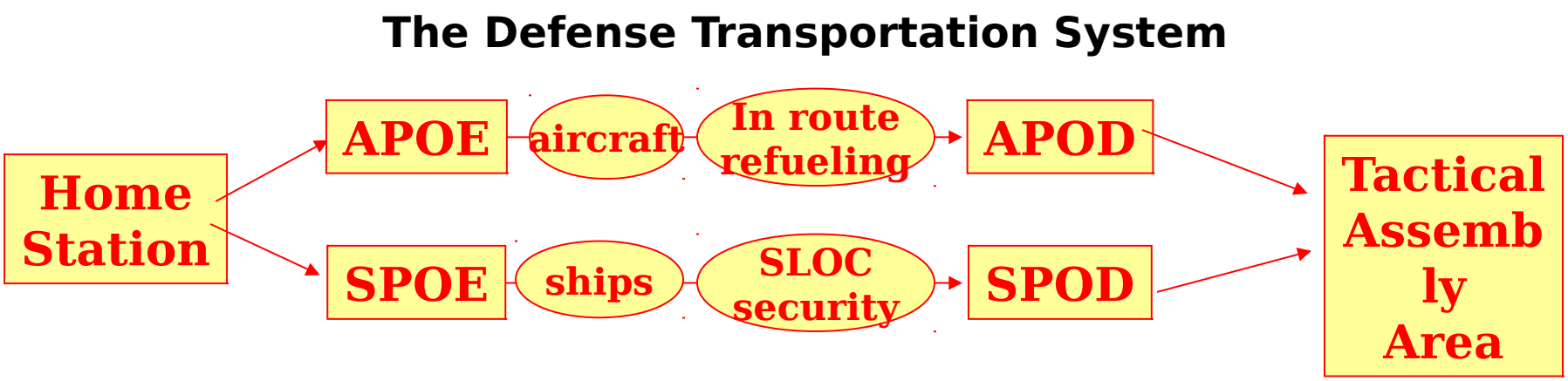
JCIDS Functional Area Analysis

Step 2: Identify Resources and Systems Needed to Perform METs



- DoD components must work together to identify resources and systems needed to provide capability or to perform METs
  - Virtually all capabilities of interest to senior leadership will be joint
- The JSPS is an existing process for identifying resources and systems
  - The JSPS proposes military strategy, forces, and capabilities necessary to achieve U.S. national security objectives. CJCSI 3100.01A
- Current JS and COCOM efforts to identify capabilities and associated tasks will lead to this next step

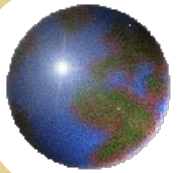
Identify Resources and Systems



- Components of the DTS vary according to the origin and the destination
  - Each entity has a different set of tasks
- DTS is joint
  - Tasks must be understood across component boundaries
- Entities must work together to optimize system output
  - Nodes and linkages are both important

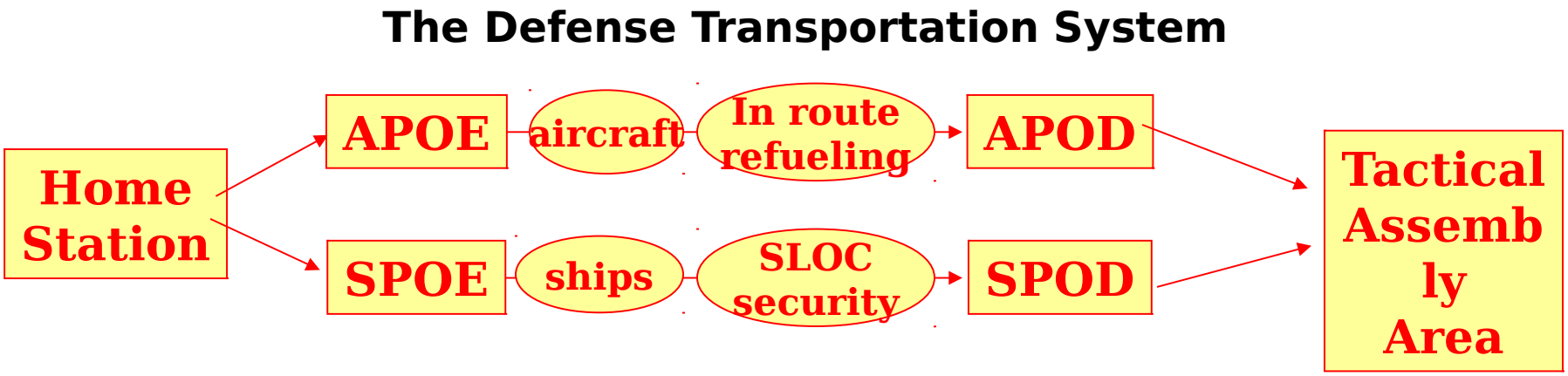
JCIDS Functional Needs Analysis

Step 3: Analyze the Ability of the Systems to Perform METs



- **DoD Readiness Reporting System requires this today**
- **DoD Component heads are required to assess their ability to perform assigned missions**
  - ***"The JQRR shall conduct timely, scenario-based readiness assessments on a quarterly basis. These assessments shall identify capability shortfalls and risks in executing missions as assigned by the Secretary of Defense and will identify appropriate measures to reduce these risks."*** **DoD D 7730.65**
- **The SROC is responsible to Sec Def for analysis of overall DoD readiness to execute assigned missions**
  - ***"The SROC shall advise the Secretary of Defense on matters pertaining to DoD readiness, oversee readiness-related activities, provide recommendations to the Secretary of Defense on readiness policy matters, and provide reports on current and projected readiness issues."*** **DoD D 5149.2**

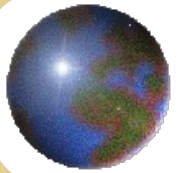
Analyze the Ability of the System



- Component heads assess and report the readiness of their systems
  - The capability of the system is measured by its output
- Component heads identify and report on the weak links in each system that limit output
- JQRR today, ESORTS tomorrow

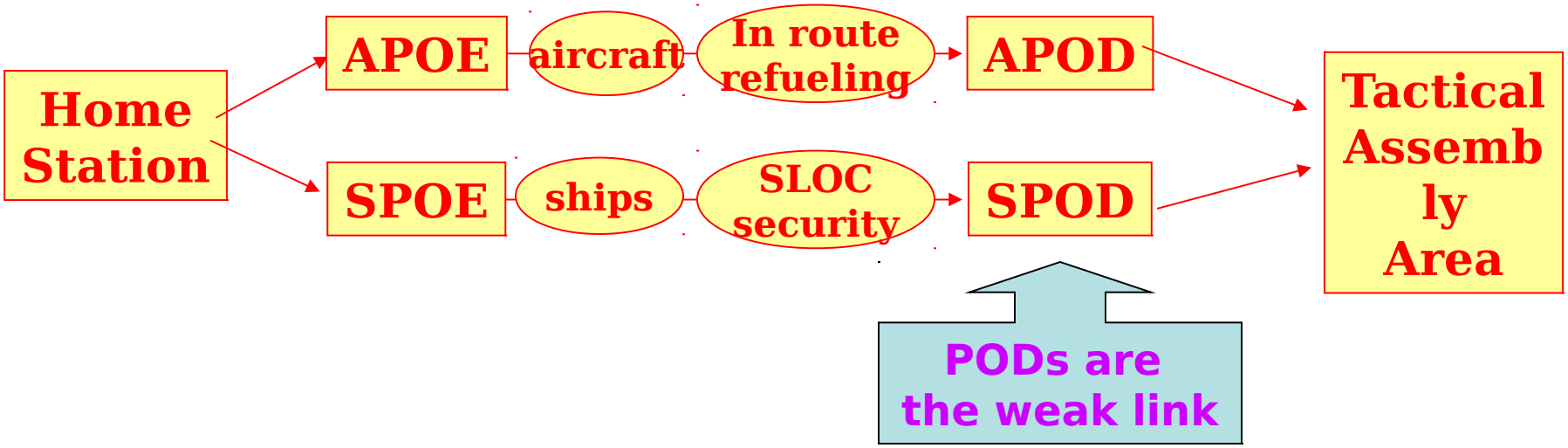
JCIDS Functional Needs Analysis

Step 4: Identify Solutions



- **Understanding the system is key**
  - **Where is the weak link?**
  - **How can the weak link be strengthened?**
  - **And the next weak link?**
- **Two kinds of solutions**
  - **Within the reality box defined by conventional assumptions**
  - **Transformational solutions break out of the reality box**

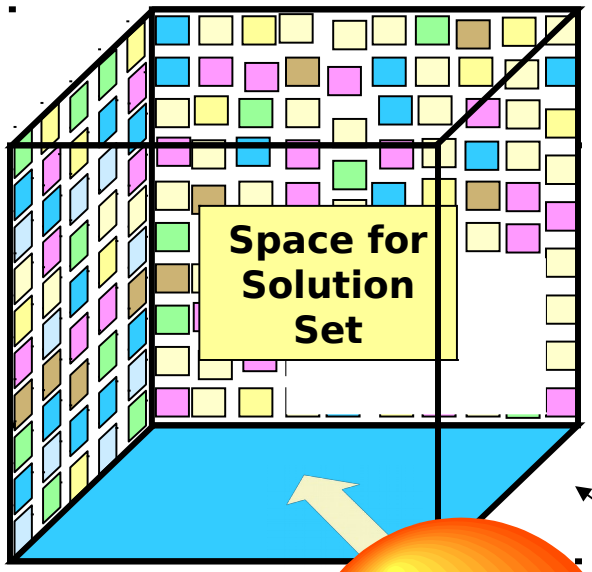
Identify Potential Solutions



- Focus on weak links that limit the output of the system
- Resources spent on links that are not the weak link do not improve output
- Current planning systems provide conventional solutions
- Transformational solutions require new ways of thinking

JCIDS Functional Solution Analysis

Current Mission Analysis Searches For Solutions Within the Constraints of Assumptions About METT-T



Weather

Command Relationships

Available Forces

Force Protection Requirements

Rules of Engagement

Time Available

Equipment

Applicable Treaties, Agreements

Geographical Factors

Logistic Support Available

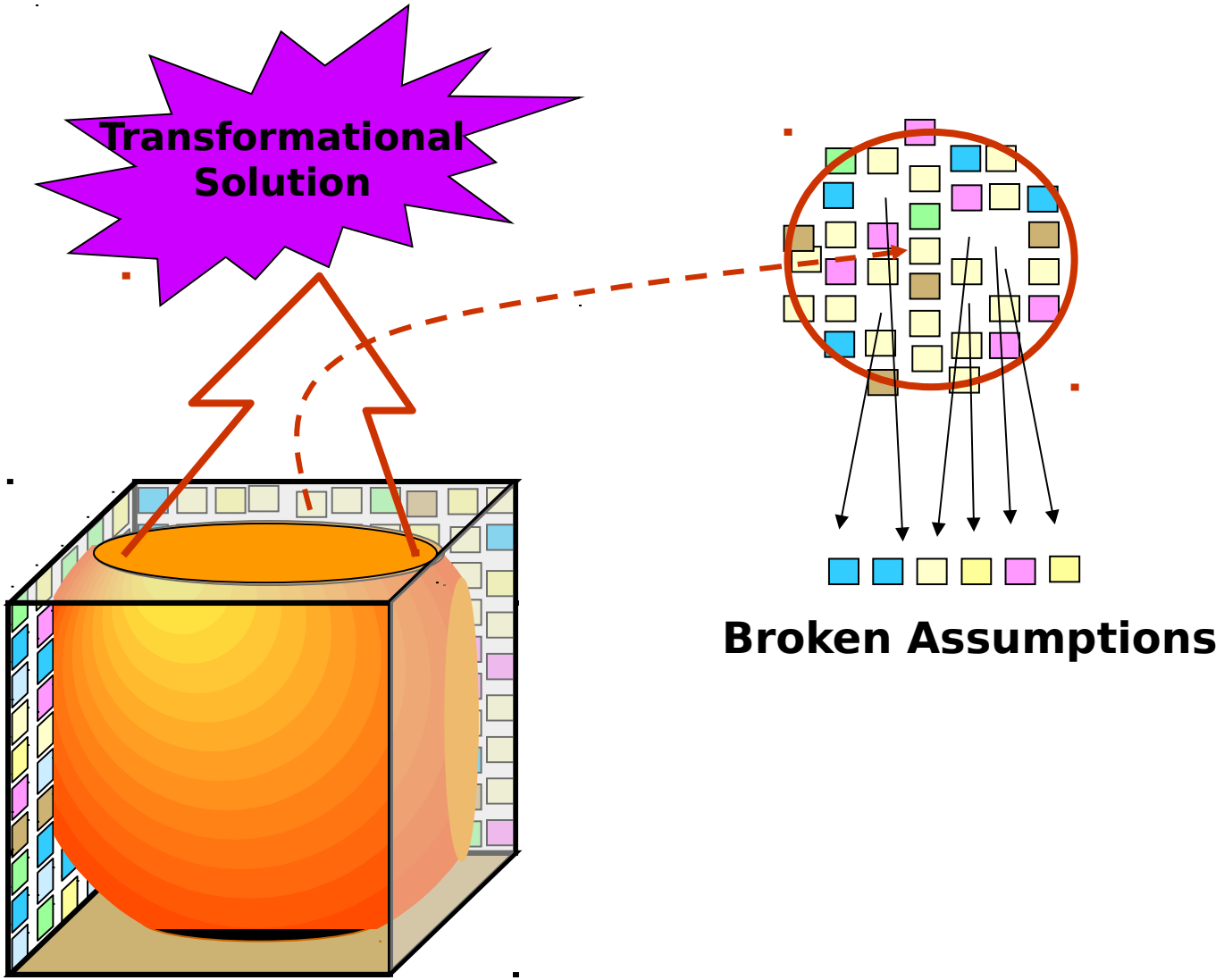
Political Considerations

Enemy Capabilities

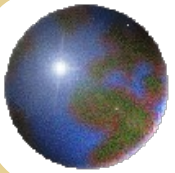
Assumptions define the solution space

Solution Must Fit Inside the Box

Transformational Solutions Can Be Identified When Assumptions Are Broken



A CRD Helps To Break Assumptions And Solve the Anti-Access Problem



Because:
• NSS requires rapid response

The Necessary

B
We must..(In order to..)
Move forces rapidly

The Action

D
We must
Use air drop

Because:
• Airdrop is the fastest form of strategic lift
• PODs are susceptible to enemy attack

The Goal

A
In order to..
Deliver adequate forces rapidly

C
We must..(In order to..)
Move large forces safely

D`
We must
Use air/sealift and air/seaports

Because:
• Air lift/drop has limited capability to deliver forces

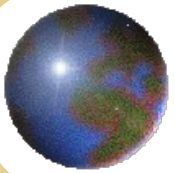
Because:
• NSS requires large forces
• Forces are in the CONUS

Because:
• Air/Sea lift & ports are the most capable form of strategic lift
• Logistic demands are large

Direction of a Solution:

1. **Employ off shore bases**
2. **Employ hybrid aircraft that do not depend on airdrop or on ports**

Systems Approaches In DoD Today



- Defense Acquisition System and Joint Capabilities Integration and Development System
- Network-centric warfare, Global Information Grid
- DoD Readiness Reporting System (DRRS)
- DoD Architecture Framework (DODAF)
- Joint Operations Concepts, Joint Mission Areas, EBO
- Logistics Enterprise Integration, Supply chain management, Distribution Process Owner, Strategic Distribution System
- Joint Deployment Process Owner, Defense Transportation System
- Operational testing – mission focus, system of systems
- Army Strategic Readiness System
- DON Capabilities Development Process & MCAS
- Air Force integration CONOPS, AF operational test command, healthcare planning
- Navy ship yards, USMC depots and maintenance planning
- DSB study of strategic strike